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Title: PULSE SHAPING SIGN.

PULSE SHAPING SIGNALS FOR ULTRAWIDEBAND COMMUNICATION

IN THE CLAIMS

Please amend the claims as follows.

1-7. (Cancelled)

- 8. (Currently Amended) An ultrawideband radio frequency signal generator, comprising:
 - a first signal generator operable to generate a sinusoidal window function;
 - a second signal generator operable to generate a carrier signal;
- a mixer operable to produce an ultrawideband radio frequency product signal as a product of the sinusoidal window function and the carrier signal; and
 - an RF switch operable to gate the ultrawideband radio frequency output signal;
- The ultrawideband radio frequency signal generator of claim 7, wherein the RF switch comprises a P-FET, a first N-FET and a second N-FET;

the source of the P-FET coupled to the first voltage source, the gate of the P-FET coupled to the input voltage level, and the drain of the P-FET coupled to the drain of the first N-FET and the gate of the second N-FET;

the gate of the first N-FET coupled to receive the control signal, and the source of the first N-FET coupled to the drain of the second N-FET;

the source of the second N-FET coupled to the voltage reference.

9-22. (Cancelled)

- 23. (Currently Amended) An ultrawideband radio frequency signal generator, comprising:
 - a first signal generator operable to generate a sinusoidal window function;
 - a second signal generator operable to generate a carrier signal; and
- a mixer operable to produce an ultrawideband radio frequency product signal as a product of the sinusoidal window function and the carrier signal; and
 - an RF switch operable to gate the ultrawideband radio frequency product signal, wherein the RF switch comprises at least three coupled CMOS transistors;

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wherein the at least three coupled CMOS transistor are coupled to a first voltage source, a voltage reference of a different voltage than the first voltage source, an input voltage level, a control signal, and an output conductor; and

wherein the at least three coupled CMOS transistors comprise The ultrawideband radio frequency signal generator of claim 22, comprising a P-FET, a first N-FET and a second N-FET;

the source of the P-FET coupled to the first voltage source, the gate of the P-FET coupled to the input voltage level, and the drain of the P-FET coupled to the drain of the first N-FET and the gate of the second N-FET;

the gate of the first N-FET coupled to receive the control signal, and the source of the first N-FET coupled to the drain of the second N-FET;

the source of the second N-FET coupled to the voltage reference.

24-29. (Cancelled)